

STATEMENT OF WORK

HOSTEL MANAGEMENT

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PREPARED BY: CODE MONKEYS

TEAM:

KALYAN KRISHNA - SE22UCSE302 –UI/UX Designer

TEJAS - SE22UCSE270 – BACKEND

SRIROOP - SE22UCSE190 – FRONTEND

MUKUND – SE22UCSE075 – UI/UX DESIGN

MOHANA KRISHNA -SE22UCSE173 – Tester and Data Entry

VIKRANTH -SE22UCSE009 -BACKEND

CHANDRAKIRAN – SE22UCSE134 - Frontend

VARUN -SE22UCSE069 - QUALITY ASSURANCE and Data Entry

PROJECT OVERVIEW

PROBLEM 1 OVERVIEW:

Current Hostel Allocation Challenges:

- Extreme overcrowding during allocation day
- Long waiting times, often extending into night
- Physical discomfort (standing in sun with luggage)
- Chaos and confusion in the process
- Frustrated parents and students
- Manual, time-consuming allocation process
- No organized system for managing crowds

- Limited staff handling large numbers of students

PROBLEM 2 OVERVIEW

Initial Consideration: Laundry Management System

At first, our team considered developing a laundry management system to help students track the availability of washing machines in hostels. However, after initial brainstorming, we realized that such a system would require hardware integration (like sensors on machines), which was beyond the scope of our current resources and timeline.

Revised Problem: Hostel Complaint and Student Information Management

While exploring other issues, we observed that wardens and hostel management face several operational challenges:

- To retrieve details of a student (such as room number, ID, or block), wardens must manually scroll through large and unorganized Excel sheets, which is inefficient and error-prone.
- There is no structured system for students to raise complaints or report issues. Currently, the only way to communicate complaints is by sending a direct email to the warden or hostel office.
- These emails often go unnoticed or ignored, and there is no way for students to track the status of their complaints.
- As a result, many students feel unheard, and minor issues escalate due to lack of attention or follow-up.

Impact

- Time-consuming and frustrating for hostel authorities to find student information during emergencies or routine checks.
- Poor communication loop between students and hostel administration.
- Lack of complaint tracking discourages students from reporting issues.
- Decreased satisfaction and transparency in hostel management.

PROPOSED SOLUTION

SOLUTION 1: Digital Pre-allocation System

Product Vision

- **FOR** hostel-seeking university students and hostel administration staff
- **WHO** need an efficient, transparent, and stress-free room allocation process
- **The DIGITAL PRE-ALLOCATION SYSTEM** is a web-based room booking platform
- **THAT** eliminates physical queuing and streamlines the entire allocation process
- **UNLIKE** the current manual allocation system
- **OUR PRODUCT** provides a transparent, time-efficient, and organized digital solution

Key Features

1. Interactive Room Visualization

- Floor-wise room layout display
- Color-coded availability status
- Real-time updates on room availability

2. Time Slot Management

- Automated time slot allocation
- Systematic scheduling of room selection
- Reduced server load through distributed access

3. Digital Documentation

- Secure document upload capability
- Integrated verification system
- Digital record maintenance

4. Online Payment Integration

- Secure payment gateway

- Instant payment confirmation
- Digital receipt generation

SOLUTION 2: Complaint and Student Information Management System

Integrated Within the Hostel Management Web Platform

Integrated Within the Hostel Management Web Platform. We have expanded the functionality of our Digital Hostel Management System (initially designed for room allocation) to also address the challenges related to student information lookup and complaint management. This enhanced platform now offers separate dashboards tailored for students, wardens, and administrators, each providing relevant tools and access levels.

Product Vision

FOR students, wardens, and hostel administration

WHO need an organized way to handle student data and communicate complaints efficiently

THE Hostel Management Web Platform

IS A role-based web application

THAT streamlines student information access and introduces a formal complaint submission and resolution process

UNLIKE the current manual and unstructured methods

OUR PRODUCT provides digital transparency, traceability, and ease of use for all stakeholders

Key Features

Student Dashboard

- Hostel application and booking
- Room selection with interactive floor plans
- Secure online fee payment
- Complaint submission and tracking system

- Personal profile management
- Virtual tour of the college and hostel facilities

Warden Dashboard

- Real-time hostel occupancy monitoring
- Easy access to student records and room details
- Complaint review, response, and resolution management

Admin Dashboard

- System-wide control and configuration
- User and role management (students and wardens)
- Hostel block and room configuration tools
- Announcements and notification management

This unified system enhances overall efficiency and transparency in hostel operations while significantly reducing the burden on both students and staff.